Claims

5

10

15

5

1. A method of indicating occupancy status of a vehicle seat based on a measure of seated weight, comprising the steps of:

applying the measure of seated weight to a low-pass filter function having an adjustable time constant to form a filtered weight;

establishing a weight threshold and a band about said weight threshold; setting said adjustable time constant to a first value that provides relatively fast tracking of the measure of seated weight by the filtered weight when at least one of the measure of seated weight and the filtered weight are outside said band;

setting said adjustable time constant to a second value that is lower than said first value to provide relatively slow tracking of the measure of seated weight by the filtered weight when the measure of seated weight and the filtered weight are both within said band; and

determining and indicating occupancy status of said seat based on a comparison of said filtered weight with said weight threshold.

2. The method of Claim 1, including the steps of:
initializing said weight threshold at a calibrated value;
detecting a condition for which the measure of seated weight is
consistently above the weight threshold or consistently below the weight
threshold for at least a predefined time interval; and

adjusting the weight threshold in response to the detected condition so as to increase a separation between the weight threshold and the measure of seated weight.

3. The method of Claim 2, including the step of:

interrupting the adjustment of the weight threshold when a difference between the weight threshold and said calibrated value reaches a maximum adjustment value. 4. The method of Claim 2, wherein said band is defined by upper and lower limit values that track changes in said weight threshold.